CENTERS FOR DISEASE CONTROL

September 19, 1986 / Vol. 35 / No. 37

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Recommendation of the Immunization Practices Advisory Committee (ACIP)

New Recommended Schedule for Active Immunization of Normal Infants and Children

Until now, the recommended schedule for active immunization of normal infants and children called for administering combined measles-mumps-rubella (MMR) vaccine at 15 months and giving the fourth dose of Diphtheria and Tetanus Toxoids and Pertussis Vaccine (DTP) and the third dose of oral poliovirus vaccine (OPV) at 18 months (*1*). Two visits have been needed to receive these vaccines in the second year of life because the safety and efficacy of administering all three simultaneously had not been proven.* A large, randomized, double-blind trial has recently been completed (*2*), and sufficient data are now available to recommend the simultaneous administration of MMR, DTP, and OPV to all children 15 months old or older who are eligible to receive these vaccines (Table 1).

In this trial, serologic response and clinical reaction rates following primary immunization with MMR were compared in a test group of 405 children given MMR simultaneously with DTP and OPV and a control group of 410 children given MMR followed by doses of DTP and OPV vaccine 2 months later. Seroconversion rates to each MMR component exceeded 96% in both groups, and the geometric mean titers achieved against the other six antigens were also similar in both groups. Rates of most of the common vaccine-associated clinical reactions to DTP and MMR were not augmented by simultaneous administration of these two vaccines. Some minor side effects were reported more frequently in the simultaneous-administration group; however, these differences were judged to be related to artifacts of the study design rather than to differences in the safety of the two vaccine schedules.

Data from CDC's Monitoring System for Adverse Events Following Immunization (MSAEFI) have been reviewed, particularly the information from Idaho, Louisiana, and Tennessee, where policies to administer MMR, DTP, and OPV simultaneously have been in effect for periods ranging from several months to years. Although there are limitations to the use of the MSAEFI data set for this purpose, the evidence suggests no increased risk of reactions associated with the simultaneous administration of these antigens.

*It should be noted that simultaneous administration of MMR, DTP, and OPV was previously recommended for children who were behind schedule in receiving their immunizations. This recommendation was based on the demonstrated safety and efficacy of other vaccine combinations (e.g., DTP and measles, or MMR and OPV).

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Although the overall implications of simultaneous administration have not been fully defined, it is anticipated that implementation of this new schedule will result in at least three benefits: (1) a decrease in the number of health-care-provider visits required for immunization during the second year of life, (2) an accompanying decrease in costs, and (3) an increase in the percentage of children who will be fully or partially immunized by 24 months of age.

Some health-care providers may continue to prefer administering MMR at 15 months followed by DTP and OPV at 18 months, especially for patients who are known to be compliant

TABLE 1. New recommended schedule for active immunization of normal infants and children*

Recommended age†	Vaccine(s)§	Comments
2 months	DTP-1¶, OPV-1**	Can be given earlier in areas of high endemicity.
4 months	DTP-2, OPV-2	6-week to 2-month interval desired between OPV doses to avoid interference.
6 months	DTP-3	An additional dose of OPV at this time is optional for use in areas with a high risk of polio exposure.
15 months††	MMR,§§ DTP-4, OPV-3	Completion of primary series of DTP and OPV.
24 months	HbPV¶¶	Can be given at 18-23 months for children in groups who are thought to be at increased risk of disease, e.g., day-care-center attendees.
4-6 years***	DTP-5, OPV-4	Preferably at or before school entry.
14-16 years	Td†††	Repeat every 10 years throughout life.

*See Reference 1 for the recommended immunization schedules for infants and children up to their seventh birthday not immunized at the recommended time in early infancy and for persons 7 years of age or older.

†These recommended ages should not be construed as absolute, i.e., 2 months can be 6-10 weeks, etc.

§For all products used, consult manufacturer's package enclosure for instructions for storage, handling, and administration. Immunobiologics prepared by different manufacturers may vary, and those of the same manufacturer may change from time to time. The package insert should be followed for a specific product.

¶DTP-Diphtheria and Tetanus Toxoids and Pertussis Vaccine Adsorbed.

**OPV-Poliovirus Vaccine Live Oral; contains poliovirus strains Types 1, 2, and 3.

††Provided at least 6 months have elapsed since DTP-3 or, if fewer than three DTPs have been received, at least 6 weeks since last previous dose of DTP or OPV. MMR vaccine should not be delayed just to allow simultaneous administration with DTP and OPV. Administering MMR at 15 months and DTP-4 and OPV-3 at 18 months continues to be an acceptable alternative.

§§MMR-Measles, Mumps, and Rubella Virus Vaccine, Live.

¶¶Hemophilus b Polysaccharide Vaccine.

***Up to the seventh birthday.

†††Td-Tetanus and Diphtheria Toxoids Adsorbed (For adult use)—contains the same dose of tetanus toxoid as DTP or DT and a reduced dose of diphtheria toxoid.

ACIP: Immunization of Infants and Children — Continued

with health-care recommendations or if other purposes are served by the additional visit. Such a schedule remains an acceptable alternative to the newly proposed schedule involving simultaneous administration of DTP, MMR, and OPV in a single visit.

References

1. ACIP: General recommendations on immunization. MMWR 1983;32:1-17.
2. Deforest A, Long FF, Lischner HW, et al. Simultaneous administration of measles-mumps-rubella (MMR) with booster doses of diphtheria-tetanus-pertussis (DTP) and poliovirus (OPV) vaccines (unpublished data).

Epidemiologic Notes and Reports

Maternal Deaths Associated with Barbiturate Anesthetics — New York City

While reviewing pregnancy-related deaths in New York City since 1980, the New York City Bureau of Maternity Services and Family Planning noted that seven deaths were associated with the administration of an ultrashort-acting barbiturate anesthetic (Brevital®) for termination of pregnancy. All seven women suffered cardiorespiratory arrest either during induction or shortly thereafter on the operating room table or in the recovery room.

All seven women were black. Five were 21 years of age or younger. The mean gestational length was 13 weeks; cases included both first- and second-trimester termination procedures. Two procedures were performed in hospitals, four in free-standing clinics, and one in a private physician's office. The dose recommended for methohexital sodium (Brevital) is 1.5 mg/kg body weight, with an induction dose of 75-100 mg administered intravenously (IV) (*1*). The mean dose for six of the seven women reviewed was 2.4 mg/kg, with a range of 1.0 mg/kg to 4.5 mg/kg (Table 1).

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TABLE 1. Characteristics of anesthesia (Brevital)-related deaths associated with abortion procedures — New York City, January 1980-June 1985

Case no.	Age (years)	Race	Gestation (weeks)	Procedure*	Site†	Total dose (mg)	Patient weight (kg)	Dose mg/kg§
1	35	Black	10	Suction	Out	300	100	3.0
2	16	Black	13	D&E	In	100	50	2.0
3	20	Black	8-10	Suction	In	25x2	52	1.0
4	19	Black	10-11	D&C¶	Out	80	59	1.4
5	32	Black	6-8	Suction	Out	300	67	4.5
6	21	Black	18	D&E	Out	150	55	2.7
7	13	Black	21	D&E	Out	NR**	NR	NR
Mean	22.3		13			163	64	2.4

*D&E=dilation and evacuation; D&C=dilation and curettage.

†In: in hospital; out: out of hospital.

§Recommended dosage=1.5 mg/kg body weight, with an induction dose of 75-100 mg IV.

¶Intended but not performed due to cardiac arrest during induction of anesthesia.

**Not recorded.

Maternal Deaths – Continued

An expert advisory panel, convened by the New York City Department of Health (NYCDH), reviewed charts, termination-of-pregnancy certificates, and autopsy reports. The panel concluded that these deaths were related to complications of anesthesia and that black women under 25 were overrepresented among the decedents, since they comprised only 26% of all women obtaining abortions in New York City during the same period (*2*). New York City's Commissioner of Health issued an alert (*3*) to physicians and administrators stipulating that standards set by the Joint Committee on the Accreditation of Hospitals (JCAH) (*4*), the American College of Obstetricians and Gynecologists (*5*), and the NYCDH (*6*) be met whenever general anesthesia is administered.

Because of concern by the NYCDH, abortion mortality data collected by CDC were reviewed to further describe the epidemiology of abortion risks in New York City compared with the United States as a whole. CDC has identified and investigated 193 legal-abortion-related deaths that occurred in the period 1972 through March 1985.

The overall abortion-related mortality rate in New York City between 1972 and 1981 was higher (though not statistically significantly) than in the other parts of the country for white women, for women of black and other races, and for women of all races combined. Mortality rates for 1982-1985 are not included because the total numbers of abortions for those years are not yet known.

Of the 193 legal-abortion-related deaths, 27 (14%) were attributed to complications of general anesthesia. The proportion of legal-abortion-related deaths attributed to complications of general anesthesia was significantly higher in New York City than in the remainder of the United States. This finding persisted throughout the period 1972-1985 (Table 2). Comparisons of women dying from complications of general anesthesia with women dying from other causes in New York City and in other places found the following: in New York City, both groups had similar distributions by age, race, marital status, and gravidity; in places other than New York City, a significantly higher proportion of blacks were among women dying from complications of general anesthesia; and in both comparisons, a significantly higher pro-

TABLE 2. Legal-abortion-related deaths identified by CDC, by cause of death—New York City and other places, 1972-1985*

Area	Cause of death: General anesthetic No.	(%)	Other causes No.	(%)	PMR† (95% CL)
1972-1979					
New York City	8	(29.6)	19	(70.4)	4.4
Other United States	9	(6.8)	123	(93.2)	(1.9-9.9)§
1980-1985					
New York City	7	(63.6)	4	(36.4)	4.9
Other United States	3	(13.0)	20	(87.0)	(1.7-13.8)§
1972-1985					
New York City	15	(39.5)	23	(60.5)	5.1
Other United States	12	(7.7)	143	(92.3)	(2.7-9.6)§
Total U.S.					
1972-1979	17	(10.7)	142	(89.3)	
1980-1985	10	(29.4)	24	(70.6)	
1972-1985	27	(14.0)	166	(86.0)	

*The numbers of legal-abortion-related deaths for the period 1983-1985 are incomplete.

†Proportional mortality ratio; 95% confidence limits.

§Significant at $p < 0.05$.

Maternal Deaths — Continued

portion of women dying from complications of general anesthesia died during the first trimester.

Regarding type of anesthetic, CDC data reveal that, among the 27 women whose deaths were attributed to complications of general anesthesia, the type of anesthetic used was known only in 23 cases. In 21 cases, short-acting barbiturates were used (Brevital in 16, Pentothal® in three, Surital® in one, and unspecified barbiturates in one). The dose employed was stated in only four cases (in addition to the above seven cases reported from New York City), but the women's weights were not stated.

Thus, a large percentage of deaths due to complications of general anesthesia was associated with the use of short-acting barbiturates. However, based on available information, a drug-specific mortality rate could not be estimated, nor could a general-anesthetic-specific mortality rate be calculated.

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Editorial Note: The higher overall legal-abortion-related mortality rate in New York City as compared with that in other parts of the United States between 1972 and 1981 may be due to the fact that women obtaining abortions in New York City during that period were in a higher risk group than women obtaining abortions in other parts of the United States. CDC abortion surveillance data show that, compared with women obtaining abortions in other parts of the United States, the New York City women were generally older, a higher proportion were of black and other races, and a higher proportion obtained their abortions during the second trimester. The significantly increased proportion of abortion-related deaths associated with general-anesthesia complications in New York City may be partially explained by the more frequent use of general anesthetics for performance of abortions in New York City than in the other parts of the country (*7*).

Previous studies have shown that, compared with local anesthetics, the use of general anesthesia for induced abortion during the first trimester was associated with a twofold to fourfold increased risk of death (*8*). However, general anesthetics have been frequently used when abortions are performed. It is estimated that general anesthetics were used for approximately 46% of all abortions done in hospitals during 1971-1975 (*9*) and approximately 27% of all abortions done in clinics during 1976-1977 (*10*).

The fact that most deaths due to general anesthesia occurred during the first trimester may be expected, since more than 85% of all abortions done in the United States between 1972 and 1981 were done during the first trimester (*11*) and since general anesthesia is more commonly employed during first-trimester procedures than second-trimester procedures. Data from the Joint Program for the Study of Abortion reveal that, between 1975 and 1978, 26% of first-trimester abortions were done under general anesthesia, compared with 13.6% of those done during the second trimester (*12*).

Short-acting barbiturates have an important place in the practice of anesthesiology. They are the IV anesthetics of choice for most anesthesiologists. They are used to induce general anesthesia and are commonly used for maintenance during procedures lasting 15-20 minutes (*11*). However, the frequency of using short-acting barbiturates for pregnancy termination procedures is not known.

The deaths due to complications of general anesthesia underscore the need for close and

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Maternal Deaths — Continued

continuous supervision of general-anesthesia administration by a qualified anesthesiologist, adequate recovery-room monitoring, and particular care in dose calculation using patient weight. Investigation of seven general anesthetic-related deaths by the New York City Bureau of Maternity Services and Family Planning revealed that four of six women were given overdoses of methohexital. Data to compare adverse reactions associated with the use of methohexital for other procedures are not available. The above analysis demonstrates an increase in the contribution of general-anesthesia complications to abortion-related deaths. While the overall abortion mortality rate based on deaths reported to CDC declined by 87% from 1972 to 1981 (*11*), the proportion of abortion-related deaths due to complications of general anesthesia increased from 11% between 1972 and 1979 to 29% between 1980 and 1985 (Table 2). Most of those deaths (24 of 27 [89%]) occurred during the first trimester. The increased risk of using a general anesthetic rather than a local anesthetic for first-trimester abortion has been documented (*8*). Clinicians should carefully review their use of general anesthetics for pregnancy-termination procedures, especially during the first trimester.

(Continued on page 587)

TABLE I. Summary—cases specified notifiable diseases, United States

Disease	37th Week Ending			Cumulative, 37th Week Ending		
	Sept. 13, 1986	Sept. 14, 1985	Median 1981-1985	Sept. 13, 1986	Sept. 14, 1985	Median 1981-1985
Acquired Immunodeficiency Syndrome (AIDS)	277	153	N	8,781	5,432	N
Aseptic meningitis	381	604	430	6,284	6,020	6,020
Encephalitis: Primary (arthropod-borne & unspec.)	40	47	70	741	815	963
Post-infectious	3	1	2	79	98	71
Gonorrhea: Civilian	14,909	19,140	19,140	612,692	622,293	632,924
Military	264	531	531	11,684	15,122	17,270
Hepatitis: Type A	411	437	437	15,350	15,477	15,477
Type B	379	496	430	18,137	18,094	16,769
Non A, Non B	41	91	N	2,486	2,920	N
Unspecified	74	101	151	3,228	4,015	5,054
Legionellosis	38	19	N	477	506	N
Leprosy	4	4	4	182	269	177
Malaria	14	21	21	735	730	730
Measles: Total*	63	39	9	5,413	2,456	2,315
Indigenous	48	27	N	5,154	2,037	N
Imported	15	12	N	259	419	N
Meningococcal infections: Total	24	25	34	1,833	1,759	2,048
Civilian	24	25	34	1,831	1,753	2,044
Military	-	-	-	2	6	10
Mumps	34	35	35	3,481	2,229	2,443
Pertussis	96	118	37	2,183	2,116	1,620
Rubella (German measles)	5	5	5	407	548	774
Syphilis (Primary & Secondary): Civilian	447	503	618	18,283	18,832	21,518
Military	1	1	6	122	122	266
Toxic Shock syndrome	3	10	N	249	281	N
Tuberculosis	438	423	507	15,394	15,036	16,516
Tularemia	5	3	6	103	127	188
Typhoid fever	6	12	11	204	253	283
Typhus fever, tick-borne (RMSF)	23	27	27	588	530	833
Rabies, animal	96	123	123	3,915	3,820	4,539

TABLE II. Notifiable diseases of low frequency, United States

	Cum 1986		Cum 1986
Anthrax	-	Leptospirosis	25
Botulism: Foodborne	6	Plague	7
Infant	37	Poliomyelitis, Paralytic (Calif. 1)	1
Other	1	Psittacosis (Upstate N.Y. 1)	75
Brucellosis (Fla. 1)	56	Rabies, human	-
Cholera (La. 1)	2	Tetanus (Tenn. 1, Tex. 1)	49
Congenital rubella syndrome	4	Trichinosis	21
Congenital syphilis, ages < 1 year	107	Typhus fever, flea-borne (endemic, murine) (Tex. 1)	35
Diphtheria	-		

*Eight of the 48 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending September 13, 1986 and September 14, 1985 (37th Week)

Reporting Area	AIDS	Aseptic Menin-gitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel-losis	Leprosy
			Primary	Post-in-fectious			A	B	NA,NB	Unspeci-fied		
	Cum 1986	1986	Cum 1986	Cum 1986	Cum 1986	Cum 1985	1986	1986	1986	1986	1986	Cum 1986
UNITED STATES	8,781	381	741	79	612,692	622,293	411	379	41	74	38	182
NEW ENGLAND	385	16	18	3	15,934	16,193	13	28	3	6	6	6
Maine	14	4	-	-	640	794	-	2	-	-	-	-
N H	10	-	2	-	398	405	-	-	-	-	-	-
Vt	4	-	3	2	184	231	1	2	1	-	1	-
Mass	212	4	4	-	8,320	8,268	5	16	2	6	5	6
R I	22	3	-	-	1,203	1,323	-	-	-	-	-	-
Conn	123	5	9	1	7,189	7,172	7	8	-	-	-	-
MID ATLANTIC	3,399	56	80	7	103,688	89,423	14	25	1	11	8	12
Upstate N Y	337	22	30	4	12,306	12,111	12	13	-	1	-	1
N Y City	2,296	4	16	-	59,701	44,683	-	4	-	10	8	10
N J	532	14	10	-	13,681	13,462	2	8	1	-	-	-
Pa	234	16	24	3	18,000	19,167	-	-	-	-	-	1
E N CENTRAL	585	102	216	11	79,466	83,012	24	38	3	2	1	4
Ohio	132	50	71	3	20,168	21,519	12	9	-	-	-	-
Ind	50	21	56	3	8,971	8,838	3	9	-	1	-	-
Ill	274	-	41	4	21,795	21,279	-	-	-	-	-	3
Mich	104	31	38	1	25,556	23,307	9	19	3	1	1	1
Wis	25	-	10	-	2,975	8,069	-	1	-	-	-	-
W N CENTRAL	168	20	41	9	26,816	28,998	12	11	-	1	1	2
Minn	60	4	17	-	3,909	4,289	2	3	-	-	-	1
Iowa	12	3	11	-	2,710	3,099	-	1	-	-	-	-
Mo	60	8	1	-	13,365	13,950	2	6	-	-	-	-
N Dak	2	-	1	-	236	197	-	-	-	-	-	-
S Dak	1	1	9	-	557	536	-	-	-	-	-	-
Nebr	8	-	-	1	2,076	2,481	1	-	-	-	-	-
Kans	25	4	2	8	3,863	4,446	7	1	-	1	1	1
S ATLANTIC	1,220	59	100	27	160,649	162,755	59	94	10	14	16	2
Del	18	-	6	-	2,614	3,059	1	1	-	-	-	-
Md	123	16	25	1	18,799	20,739	14	22	3	2	13	-
D C	151	-	-	1	11,947	10,890	-	2	-	-	-	-
Va	108	12	29	1	13,071	13,420	3	20	2	6	-	1
W Va	7	2	25	-	1,611	1,848	1	1	-	2	-	-
N C	47	7	13	1	24,982	25,404	9	6	2	2	-	-
S C	29	1	-	-	13,915	15,842	1	13	-	-	1	-
Ga	197	11	-	1	27,037	32,607	4	8	-	-	-	-
Fla	540	10	2	22	46,673	39,146	26	21	3	2	2	1
E S CENTRAL	111	25	47	4	49,954	53,026	17	29	1	-	-	1
Ky	25	17	22	1	5,465	6,033	1	4	1	-	-	-
Tenn	53	1	4	1	19,339	20,102	-	6	-	-	-	-
Ala	19	7	20	2	14,271	16,188	2	16	-	-	-	1
Miss	14	-	1	-	10,879	10,703	14	3	-	-	-	-
W S CENTRAL	496	47	100	6	71,790	78,500	57	56	12	16	1	17
Ark	22	3	-	2	6,854	7,597	2	5	1	-	-	-
La	114	4	5	-	13,101	15,043	1	7	1	2	1	1
Okla	27	6	18	-	8,301	8,647	6	4	1	1	-	-
Tex	333	34	77	4	43,534	47,213	48	40	9	13	-	16
MOUNTAIN	211	31	26	1	18,337	19,205	53	19	2	4	-	11
Mont	4	-	-	1	505	537	5	1	-	-	-	-
Idaho	2	-	-	-	584	600	2	5	1	-	-	-
Wyo	4	-	2	-	406	432	-	1	-	-	-	-
Colo	97	8	4	-	4,788	5,661	10	8	-	2	-	3
N Mex	14	7	3	-	1,812	2,216	28	-	1	-	-	-
Ariz	53	16	9	-	5,968	5,597	6	-	-	1	-	5
Utah	13	-	6	-	788	877	-	-	-	1	-	1
Nev	24	-	2	-	3,506	3,285	2	4	-	-	-	2
PACIFIC	2,206	25	113	11	86,258	91,181	162	79	9	20	5	127
Wash	119	2	11	-	6,495	6,980	8	6	-	-	3	15
Oreg	47	-	-	-	3,610	4,583	21	13	1	-	-	-
Calif	1,995	20	99	11	73,242	76,202	133	56	8	20	2	88
Alaska	11	-	3	-	1,986	2,134	-	4	-	-	-	-
Hawaii	34	3	-	-	945	1,282	-	-	-	-	-	24
Guam	-	-	-	-	135	148	-	-	-	-	-	1
P R	76	-	5	-	1,692	2,350	1	2	-	-	-	7
V I	3	-	-	-	178	337	-	2	-	-	-	-
Pac. Trust Terr	-	-	-	-	334	655	2	-	-	-	-	39
Amer Samoa	-	-	-	-	31	-	3	-	-	-	-	2

N: Not notifiable U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending September 13, 1986 and September 14, 1985 (37th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	1986	Cum. 1986	Cum. 1985
UNITED STATES	735	48	5,154	15	259	2,456	1,833	34	3,481	96	2,183	2,116	5	407	548
NEW ENGLAND	43	4	82	6	14	126	124	1	63	2	120	98	-	9	12
Maine	2	3	13	-	-	1	23	-	-	-	2	5	-	-	-
N.H.	2	-	42	-	-	-	6	1	13	-	59	39	-	1	2
Vt.	1	-	-	-	-	-	15	-	3	-	3	3	-	1	-
Mass.	24	1	24	6 †§	12	118	27	-	9	-	28	31	-	4	6
R.I.	5	-	2	-	-	-	17	-	9	-	5	13	-	2	-
Conn.	9	-	1	-	2	7	36	-	19	2	23	7	-	1	4
MID.ATLANTIC	106	21	1,880	7	30	204	294	2	153	5	151	130	-	31	217
Upstate N.Y.	39	6	74	5 †§	24	85	98	-	55	4	98	67	-	23	17
N.Y. City	28	15	659	2 †	4	63	60	-	17	-	3	18	-	5	175
N.J.	20	-	905	-	-	28	30	1	38	-	14	5	-	3	11
Pa.	19	-	22	-	2	28	106	1	43	1	36	40	-	-	14
E.N. CENTRAL	46	12	1,021	-	17	527	255	14	2,379	4	274	494	-	39	29
Ohio	13	-	-	-	10	54	103	-	100	-	117	53	-	1	-
Ind.	2	8	25	-	-	57	24	1	32	2	24	147	-	-	1
Ill.	15	4	676	-	4	297	68	11	1,791	1	30	47	-	28	12
Mich.	13	-	58	-	-	60	54	2	253	1	27	35	-	8	15
Wis.	3	-	262	-	3	59	6	-	203	-	76	212	-	2	1
W.N. CENTRAL	23	-	322	-	17	11	88	4	89	49	238	141	1	11	19
Minn.	6	-	45	-	4	6	17	-	1	2	47	70	-	-	2
Iowa	1	-	133	-	1	-	11	1	25	-	18	5	-	1	1
Mo.	10	-	25	-	6	2	31	2	17	6	18	27	-	1	7
N. Dak.	-	-	25	-	1	2	-	-	3	-	4	9	-	1	2
S. Dak.	-	-	-	-	-	-	4	-	1	-	14	2	-	-	-
Nebr.	4	-	-	-	-	-	10	-	-	-	7	4	-	-	-
Kans.	2	-	94	-	5	1	15	1	42	41	128	24	1	8	7
S. ATLANTIC	88	2	554	-	56	307	336	-	161	11	627	413	1	11	50
Del.	1	-	1	-	-	-	2	-	-	1	226	1	-	-	1
Md.	12	-	28	-	9	103	44	-	17	2	139	246	-	-	6
D.C.	1	-	-	-	2	20	4	-	-	-	-	-	-	-	-
Va.	22	-	36	-	24	28	59	-	34	-	33	11	-	-	2
W. Va.	4	-	2	-	-	33	3	-	39	-	23	4	-	-	9
N.C.	4	1	3	-	1	9	56	-	14	-	58	21	-	-	-
S.C.	6	-	274	-	-	3	30	-	12	-	13	2	-	-	3
Ga.	9	-	79	-	14	8	50	-	15	8	111	81	-	-	-
Fla.	29	1	133	-	6	103	88	-	30	-	24	47	1	11	29
E.S. CENTRAL	16	-	58	-	9	7	100	1	28	-	43	37	-	4	2
Ky.	4	-	-	-	6	5	24	-	6	-	5	6	-	4	2
Tenn.	1	-	56	-	1	1	38	-	17	-	15	16	-	-	-
Ala.	7	-	1	-	1	-	28	1	4	-	23	11	-	-	-
Miss.	4	-	2	-	1	1	12	-	1	-	-	4	-	-	-
W.S. CENTRAL	73	1	598	2	38	425	163	2	154	3	174	303	-	57	32
Ark.	-	-	276	-	2	-	24	-	7	1	12	12	-	-	1
La.	14	-	4	-	-	42	23	-	2	2	13	11	-	-	-
Okla.	9	-	37	-	2	1	21	N	N	-	96	136	-	-	1
Tex.	50	1	281	2 †	34	382	95	2	145	-	54	144	-	57	30
MOUNTAIN	30	1	300	-	26	529	91	1	209	10	217	150	-	23	5
Mont.	-	-	-	-	8	137	8	-	5	1	14	8	-	2	-
Idaho	1	-	1	-	-	137	3	-	7	-	33	10	-	-	1
Wyo.	-	-	-	-	-	-	2	-	-	-	4	-	-	1	-
Colo.	8	-	2	-	5	13	15	-	12	2	59	54	-	1	-
N. Mex.	5	-	32	-	7	6	9	N	N	-	20	11	-	-	2
Ariz.	10	-	252	-	6	236	19	1	170	2	50	27	-	2	1
Utah	3	1	12	-	-	-	9	-	10	4	33	40	-	14	-
Nev.	3	-	1	-	-	-	26	-	5	1	4	-	-	3	1
PACIFIC	310	7	559	-	52	320	382	9	255	12	341	350	3	222	182
Wash.	22	-	158	-	25	72	54	-	8	3	102	60	-	14	14
Oreg.	15	-	4	-	4	5	31	N	N	-	10	40	-	1	1
Calif.	272	1	370	-	22	222	284	9	223	8	219	204	3	202	118
Alaska	-	-	-	-	-	-	11	-	6	-	2	29	-	-	1
Hawaii	1	6	27	-	1	21	2	-	18	1	8	17	-	5	48
Guam	1	-	4	-	1	11	-	-	4	-	-	-	-	3	2
P.R.	4	-	33	-	-	54	2	5	31	-	13	10	-	60	25
V.I.	-	-	-	-	-	10	-	-	13	-	-	-	-	-	-
Pac. Trust Terr.	-	-	-	-	-	-	1	-	10	-	-	-	-	2	-
Amer. Samoa	-	-	2	-	-	-	-	-	4	-	-	-	-	1	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending September 13, 1986 and September 14, 1985 (37th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum 1986	Cum 1985	1986	Cum 1986	Cum 1985	Cum 1986	Cum 1986	Cum 1986	Cum 1986
UNITED STATES	18,283	18,832	3	15,394	15,036	103	204	588	3,915
NEW ENGLAND	337	400	-	494	520	1	12	12	5
Maine	15	12	-	33	37	-	-	-	-
N.H.	10	29	-	19	16	-	-	2	-
Vt.	8	6	-	14	5	-	-	-	-
Mass.	182	191	-	256	315	1	10	4	-
R.I.	18	12	-	40	38	-	-	3	3
Conn.	104	150	-	132	109	-	2	3	2
MID. ATLANTIC	2,853	2,500	-	3,133	2,776	1	16	27	471
Upstate N.Y.	120	181	-	457	486	-	3	17	62
N.Y. City	1,517	1,533	-	1,629	1,330	-	7	5	-
N.J.	484	490	-	534	387	1	5	2	16
Pa.	532	296	-	513	573	-	1	3	393
E.N. CENTRAL	696	738	-	1,859	1,837	-	17	51	98
Ohio	95	106	-	329	326	-	4	46	9
Ind.	86	67	-	195	226	-	2	-	14
Ill.	351	362	-	797	785	-	2	2	29
Mich.	125	156	-	450	391	-	7	3	21
Wis.	39	47	-	88	109	-	2	-	25
W.N. CENTRAL	154	158	1	456	421	30	8	40	626
Minn.	27	33	1	110	90	-	1	1	90
Iowa	6	17	-	39	44	1	-	1	143
Mo.	82	78	-	229	207	23	6	20	65
N. Dak.	3	2	-	8	8	-	-	1	132
S. Dak.	4	5	-	19	19	2	-	6	126
Nebr.	11	7	-	7	13	1	-	4	23
Kans.	21	16	-	48	40	3	1	7	47
S. ATLANTIC	5,548	5,566	-	2,956	3,036	9	32	269	938
Del.	39	28	-	27	29	-	1	1	-
Md.	307	324	-	230	266	2	10	28	459
D.C.	212	245	-	101	118	1	4	-	26
Va.	260	215	-	245	266	2	6	43	135
W. Va.	18	15	-	88	81	-	3	7	32
N.C.	357	481	-	406	382	1	4	95	7
S.C.	469	582	-	390	368	-	-	62	47
Ga.	1,072	975	-	453	512	3	-	31	151
Fla.	2,814	2,701	-	1,016	1,014	-	4	2	81
E.S. CENTRAL	1,234	1,426	-	1,359	1,335	8	2	77	255
Ky.	56	47	-	321	320	3	-	17	70
Tenn.	451	452	-	395	377	4	1	35	97
Ala.	397	451	-	428	405	1	-	14	86
Miss.	330	476	-	215	233	-	1	11	2
W.S. CENTRAL	3,588	4,305	-	1,934	1,851	46	15	103	565
Ark.	173	224	-	255	204	34	-	8	131
La.	624	750	-	320	264	1	1	-	17
Okla.	98	123	-	185	184	7	1	80	52
Tex.	2,693	3,208	-	1,174	1,199	4	13	15	365
MOUNTAIN	423	501	1	360	391	7	11	8	546
Mont.	8	5	1	20	46	1	1	4	176
Idaho	10	4	-	17	18	-	-	-	7
Wyo.	1	7	-	-	5	-	-	1	231
Colo.	103	125	-	31	43	3	1	3	26
N. Mex.	51	95	-	69	70	1	-	-	6
Ariz.	169	232	-	173	172	-	6	-	90
Utah	13	5	-	28	11	1	2	-	3
Nev.	70	28	-	22	26	1	1	-	7
PACIFIC	3,650	3,239	1	2,843	2,869	1	91	1	411
Wash.	110	84	-	134	164	-	3	-	5
Oreg.	77	67	-	97	93	-	-	-	-
Calif.	3,437	3,035	1	2,441	2,405	-	84	1	398
Alaska	1	2	-	37	71	1	1	-	8
Hawaii	25	50	-	134	136	-	3	-	-
Guam	1	2	-	34	31	-	1	-	-
P.R.	629	589	-	240	243	-	5	-	35
V.I.	1	2	-	1	1	-	-	-	-
Pac. Trust Terr.	198	92	-	52	44	-	45	-	-
Amer. Samoa	-	-	-	5	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending September 13, 1986 (37th Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	570	381	116	41	16	16	37
Boston, Mass. §	154	91	38	12	5	8	14
Bridgeport, Conn.	45	29	9	2	3	2	2
Cambridge, Mass.	25	16	7	2	-	-	4
Fall River, Mass.	33	24	7	1	1	-	-
Hartford, Conn.	68	45	16	5	1	1	2
Lowell, Mass.	12	8	2	2	-	-	1
Lynn, Mass.	13	6	4	2	-	1	-
New Bedford, Mass.	23	18	5	-	-	-	2
New Haven, Conn.	38	27	5	4	1	1	2
Providence, R.I.	27	20	5	1	-	1	2
Somerville, Mass.	5	5	-	-	-	-	-
Springfield, Mass.	48	33	7	4	2	2	1
Waterbury, Conn.	27	20	4	1	2	-	3
Worcester, Mass.	52	39	7	5	1	-	4
MID ATLANTIC	2,888	1,705	573	293	53	73	122
Albany, N.Y.	56	33	19	1	-	3	-
Allentown, Pa.	15	12	3	-	-	-	-
Buffalo, N.Y.	81	54	19	4	2	2	6
Camden, N.J.	34	15	9	4	2	4	1
Elizabeth, N.J.	23	17	5	1	-	-	-
Erie, Pa.†	47	31	10	3	2	1	1
Jersey City, N.J.	38	19	10	6	2	1	2
N.Y. City, N.Y.	1,436	907	274	191	31	33	50
Newark, N.J.	82	38	23	14	3	4	4
Paterson, N.J. §	28	18	6	4	-	-	2
Philadelphia, Pa.	409	260	92	35	6	16	32
Pittsburgh, Pa.†	55	32	13	5	1	4	2
Reading, Pa.	33	24	7	1	1	-	2
Rochester, N.Y.	121	85	25	8	-	3	8
Schenectady, N.Y.	30	25	5	-	-	-	3
Scranton, Pa.†	28	24	2	-	-	-	1
Syracuse, N.Y.	116	73	30	8	2	2	8
Trenton, N.J.	29	15	11	2	1	-	-
Utica, N.Y.	17	12	3	2	-	-	-
Yonkers, N.Y.	22	11	7	4	-	-	2
E.N. CENTRAL	2,312	1,494	508	168	67	75	74
Akron, Ohio	74	43	16	6	6	3	-
Canton, Ohio	42	31	7	1	2	1	2
Chicago, Ill.§	564	382	125	45	10	22	16
Cincinnati, Ohio	148	82	31	10	8	15	6
Cleveland, Ohio	160	103	37	12	7	1	1
Columbus, Ohio	126	82	32	8	2	2	2
Dayton, Ohio	95	57	26	4	5	3	4
Detroit, Mich.	248	139	61	28	12	8	4
Evansville, Ind.	38	28	6	1	1	-	1
Fort Wayne, Ind.	75	52	14	6	-	3	4
Gary, Ind.	24	19	4	1	-	-	-
Grand Rapids, Mich.	58	40	11	-	2	3	3
Indianapolis, Ind.	186	124	44	10	5	3	5
Madison, Wis.	34	23	5	4	-	2	4
Milwaukee, Wis.	139	95	28	9	2	5	8
Peoria, Ill.	44	31	10	1	2	-	2
Rockford, Ill.	45	40	2	2	1	-	5
South Bend, Ind.	58	41	12	4	-	1	5
Toledo, Ohio	98	65	20	9	2	2	2
Youngstown, Ohio	62	37	17	7	-	1	-
W.N. CENTRAL	736	505	145	38	23	25	32
Des Moines, Iowa	71	44	19	5	2	1	1
Duluth, Minn.	54	36	14	2	2	-	-
Kansas City, Kans.	26	15	4	1	3	3	-
Kansas City, Mo.	115	78	23	3	6	5	4
Lincoln, Nebr.	31	22	6	1	1	1	-
Minneapolis, Minn.	62	43	9	3	1	6	5
Omaha, Nebr.	86	58	22	2	3	-	4
St. Louis, Mo.	139	100	20	13	-	6	10
St. Paul, Minn.	69	55	7	3	3	1	2
Wichita, Kans.	84	54	21	5	2	2	6
S. ATLANTIC	1,178	709	270	124	40	36	44
Atlanta, Ga.	160	87	42	21	7	3	2
Baltimore, Md.	44	30	5	8	1	-	3
Charlotte, N.C.	73	42	26	3	1	1	2
Jacksonville, Fla.	139	80	36	9	7	7	9
Miami, Fla.	99	52	30	13	2	1	-
Norfolk, Va.	71	43	13	7	3	5	4
Richmond, Va.	88	50	25	8	2	1	7
Savannah, Ga.	45	33	9	1	1	1	1
St. Petersburg, Fla.	157	130	16	6	2	3	7
Tampa, Fla.	63	33	15	9	2	3	5
Washington, D.C.	203	98	47	37	10	11	4
Wilmington, Del.	38	28	6	2	2	-	-
E.S. CENTRAL	708	465	147	49	25	22	23
Birmingham, Ala.	116	72	25	10	1	8	3
Chattanooga, Tenn.	43	31	9	2	1	-	4
Knoxville, Tenn.	71	49	10	10	2	-	-
Louisville, Ky.	95	64	20	4	4	3	-
Memphis, Tenn. §	164	108	35	10	5	6	7
Mobile, Ala.	52	31	13	1	4	3	3
Montgomery, Ala.	34	24	6	2	2	-	-
Nashville, Tenn.	133	86	29	10	6	2	6
W.S. CENTRAL	1,333	799	289	139	54	52	56
Austin, Tex.	39	25	8	4	1	1	-
Baton Rouge, La.	44	22	10	5	3	4	3
Corpus Christi, Tex.	56	38	12	5	1	-	-
Dallas, Tex.	191	104	39	31	11	6	7
El Paso, Tex.	47	30	8	6	1	2	7
Fort Worth, Tex.	101	62	20	5	5	9	6
Houston, Tex.	241	140	61	24	10	6	4
Little Rock, Ark.	111	74	17	9	4	7	6
New Orleans, La.	151	84	36	18	6	7	-
San Antonio, Tex.	180	105	45	18	7	5	9
Shreveport, La.	103	70	18	11	1	3	8
Tulsa, Okla.	69	45	15	3	4	2	6
MOUNTAIN	617	388	127	57	29	16	23
Albuquerque, N.Mex.	82	42	29	8	2	1	-
Colo. Springs, Colo.	32	20	7	3	-	2	2
Denver, Colo.	107	69	21	9	6	2	2
Las Vegas, Nev.	83	52	17	12	1	1	2
Ogden, Utah	32	28	4	-	-	-	1
Phoenix, Ariz.	120	78	16	9	11	6	5
Pueblo, Colo.	17	12	3	-	2	-	-
Salt Lake City, Utah	48	21	13	9	3	2	-
Tucson, Ariz.	96	66	17	7	4	2	11
PACIFIC	2,104	1,318	418	229	86	50	112
Berkeley, Calif.	17	12	4	1	-	-	1
Fresno, Calif.	100	53	27	9	8	3	13
Glendale, Calif.	35	28	3	3	1	-	1
Honolulu, Hawaii	79	52	19	2	1	5	4
Long Beach, Calif.	94	66	11	8	5	4	9
Los Angeles, Calif.	681	404	141	99	29	8	19
Oakland, Calif.	68	41	15	9	-	3	5
Pasadena, Calif.	37	32	2	-	3	-	1
Portland, Oreg.	125	74	29	6	9	7	4
Sacramento, Calif.	134	91	21	18	4	-	15
San Diego, Calif.	165	100	38	12	8	7	16
San Francisco, Calif.	140	84	31	22	-	3	2
San Jose, Calif.	185	108	43	21	9	6	11
Seattle, Wash.	128	88	18	10	6	6	4
Spokane, Wash.	63	44	9	7	3	-	6
Tacoma, Wash.	53	43	7	2	-	1	1
TOTAL	12,256††	7,761	2,593	1,138	393	385	523

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza.

† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

†† Total includes unknown ages.

§ Data not available. Figures are estimates based on average of past 4 weeks.

Maternal Deaths — Continued

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Tuberculosis and Acquired Immunodeficiency Syndrome — Florida

In 1985, 1,425 tuberculosis cases were reported in Florida, an increase of almost 7% over the 1,335 cases reported in 1984. Concern about a possible association between human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV)* infection and increased tuberculosis morbidity (*1,2*) led to an evaluation of data on acquired immunodeficiency syndrome (AIDS) and tuberculosis. Four subgroups of persons were identified and their characteristics compared: (1) AIDS patients with and without tuberculosis (AIDS/TB and AIDS/non-TB, respectively), and (2) tuberculosis patients with and without AIDS (TB/AIDS and TB/non-AIDS, respectively). The overlapping subgroups of AIDS/TB and TB/AIDS are listed separately only because their characteristics were analyzed from two discrete data bases.

AIDS PATIENTS WITH AND WITHOUT TUBERCULOSIS

Of the 1,094 persons meeting the CDC surveillance definition of AIDS (*3*) reported from Florida in the period 1981-1985, 109 (10%) were also diagnosed in the period 1978-1985 as having tuberculosis.† The number of AIDS patients with tuberculosis by year of AIDS diagnosis rose progressively from zero in 1981 to a peak of 55 in 1984; this number fell to 26 in

*Subcommittee of the International Committee for the Taxonomy of Viruses has proposed that HTLV-III/LAV be officially designated as "Human Immunodeficiency Virus" or HIV.

†These time intervals were chosen because AIDS was first recognized nationally in 1981 and because it was noted that the diagnosis of tuberculosis often preceded the diagnosis of AIDS by months or years.

Tuberculosis and AIDS — Continued

1985. The interval between report of tuberculosis and diagnosis of AIDS ranged from 7 years before to 15 months after AIDS was diagnosed (median interval, 3 months before AIDS diagnosis). Sixty-two (57%) of the patients were reported to have tuberculosis more than 1 month before they were diagnosed as having AIDS; 30 (28%), within a month before or after they were diagnosed as having AIDS; and 17 (16%), more than a month after they were diagnosed as having AIDS.

AIDS/TB patients were similar to AIDS/non-TB patients with respect to age and sex (Table 3). However, AIDS/TB patients were more frequently black (81%) than were AIDS/non-TB patients (37%), were more frequently foreign born (60% versus 25%), and were less frequently homosexual or bisexual men (21% versus 62%).

TUBERCULOSIS PATIENTS WITH AND WITHOUT AIDS

Of the 7,241 persons in Florida reported to have tuberculosis in the period 1981-1985, 105 (2%)[§] also had AIDS. The number and proportion has generally continued to rise, e.g., in 1981, five (less than 1%) of 1,553; in 1984, 33 (3%) of 1,335; the number fell to 23 (2%) of 1,425 in 1985. Of the 105 TB/AIDS patients, 65 (60%) were reported to have tuberculosis while residing in Dade County; and 23 (22%), while residing in Palm Beach County. Compared with TB/non-AIDS patients, TB/AIDS patients were younger (median 30 years versus 49

[§]The other four of the 109 mentioned earlier in this report had been reported to have tuberculosis before 1981, when no detailed information on individual cases was available; they were therefore excluded from this analysis.

TABLE 3. Characteristics of acquired immunodeficiency syndrome (AIDS) cases with and without tuberculosis (TB)—Florida, 1981-1985*

Characteristic	AIDS/TB (n = 109) No. (%)	AIDS/non-TB (n = 985) No. (%)	Statistical significance
Age			
Median	30	34	
Mean	33.6	34.6	Not significant
Race/ethnicity			
Black	88 (80.7)	363 (36.9)	
White	12 (11.0)	495 (50.3)	$p < 0.001$
Hispanic	9 (8.3)	122 (12.4)	
Other	0 (0.0)	5 (0.5)	
Sex			
Female	18 (16.5)	110 (11.2)	
Male	91 (83.5)	875 (88.8)	Not significant
Country of origin			
U.S.	44 (40.4)	737 (74.8)	
Foreign	65 (59.6)	248 (25.2)	$p < 0.001$
AIDS risk factors			
Homosexual/ bisexual men	23 (21.1)	609 (61.8)	
IV drug abuse	20 (18.3)	128 (13.0)	$p < 0.001$
Born NIR ctry†	55 (50.5)	127 (12.9)	
Other/none	11 (10.1)	121 (12.3)	

*Because only aggregate data were available for certain characteristics, no adjustments were made in the analysis.

†No identified risk country—country in which heterosexual transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus is thought to play a major role.

Tuberculosis and AIDS — Continued

years) and were more often black (79% versus 51%), male (83% versus 71%), and foreign born (60% versus 21%). TB/AIDS patients were also more likely to have extrapulmonary tuberculosis (38% versus 11%), particularly lymphatic and miliary forms, while pleural tuberculosis was extremely rare (Table 4).

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Editorial Note: The total number of AIDS patients in the United States meeting the CDC surveillance case definition represents only a fraction of the number of persons with HTLV-III/LAV infection. It has been estimated that, in 1985, for every case of AIDS, there were 50-100 persons with HTLV-III/LAV infection (*4*). The number of tuberculosis patients with HTLV-III/LAV infection but without AIDS may also exceed the number who have overt AIDS. The fact that tuberculosis did not decline in the nation as a whole in 1985 and the increase in the incidence of tuberculosis in certain areas may be partly explained by the infection with HTLV-III/LAV of persons who already had tuberculous infection (*2*). There are an estimated 10 million persons with latent tuberculous infection in the United States and as many as 1.5 million persons with HTLV-III/LAV infection (*4*). The degree to which these two infected populations overlap may be a factor in the number of tuberculosis cases that develop.

The fact that 10% of AIDS patients from Florida have been diagnosed as having tuberculosis suggests an association between AIDS and tuberculosis. Most of the tuberculosis among the AIDS patients may represent reactivation of latent tuberculous infection acquired in years past rather than progression from recently acquired infection. Immunodeficiency caused by HTLV-III/LAV infection probably allows latent tuberculous infection to progress to clinical

TABLE 4. Characteristics of tuberculosis (TB) cases with and without acquired immunodeficiency syndrome (AIDS)— Florida, 1981-1985

Characteristic	TB/AIDS (n = 105) No. (%)	TB/non-AIDS (n = 7,136) No. (%)	Statistical significance
Age			
Median	30	49	$p < 0.001$
Mean	33.2	48.7	
Race			
Black	83 (79.0)	3,613 (50.5)	
White	22 (21.0)	3,380 (47.4)	$p < 0.001$
Other	0 (0.0)	143 (2.0)	
Ethnicity			
Hispanic	11 (10.5)	685 (9.6)	
Non-Hispanic	94 (89.5)	6,451 (90.4)	Not significant
Sex			
Female	18 (17.1)	2,084 (29.2)	
Male	87 (82.9)	5,052 (70.8)	$0.001 < p < 0.01$
Country of origin			
U.S.	42 (40.0)	5,610 (78.6)	
Foreign	63 (60.0)	1,526 (21.4)	$p < 0.001$
Form of TB			
Pulmonary	65 (61.9)	6,331 (88.7)	
Pleural	1 (0.1)	216 (3.0)	
Lymphatic	20 (19.0)	167 (2.3)	$p < 0.001$
Miliary	10 (9.5)	96 (1.3)	
Other	9 (8.6)	326 (4.6)	

Tuberculosis and AIDS – Continued

tuberculosis. However, radiographically, the presentation of tuberculosis in AIDS patients is often indistinguishable from primary forms of the disease as seen in patients without AIDS (*5*). Thus, recently acquired tuberculous infection in this population cannot be ruled out.

The risk that persons with latent tuberculous infection who acquire AIDS (or HTLV-III/LAV infection without AIDS) will develop clinically active tuberculosis cannot be quantified from currently available data. However, the 10% incidence of clinically overt tuberculosis is substantially higher than would be expected for any other group, including tuberculin-positive contacts of tuberculosis cases (*6*).

The reason for the decreased number of TB/AIDS patients reported from Florida in 1985 is unknown. It may represent reporting artifact or a decline in the number of susceptible individuals at risk.

Other health departments may wish to determine the degree to which tuberculosis morbidity is associated with AIDS and the prevalence of HTLV-III/LAV infection in tuberculosis patients. As recommended in recently published guidelines, as part of the evaluation of patients with tuberculosis, risk factors for HTLV-III/LAV should be identified (*7*). Voluntary testing of all persons with these risk factors is also recommended. In addition, testing for HTLV-III/LAV antibody should be considered for patients of all ages who have severe or unusual manifestations of tuberculosis. Such additional studies would help to determine the magnitude of the AIDS/TB problem in other areas and further define the population characteristics of persons with both tuberculosis and HTLV-III/LAV infection (with and without AIDS).

Treatment of tuberculosis patients who also have AIDS or HTLV-III/LAV infection should be instituted in accordance with recently published guidelines (*7*). Prevention of tuberculosis among persons with HTLV-III/LAV infection will require the identification of both HTLV-III/LAV and tuberculous infection and the administration of isoniazid preventive therapy as currently recommended (*7*). Counseling of persons being tested for HTLV-III/LAV infection should be provided in accordance with current recommendations to prevent the transmission of HTLV-III/LAV (*8*).

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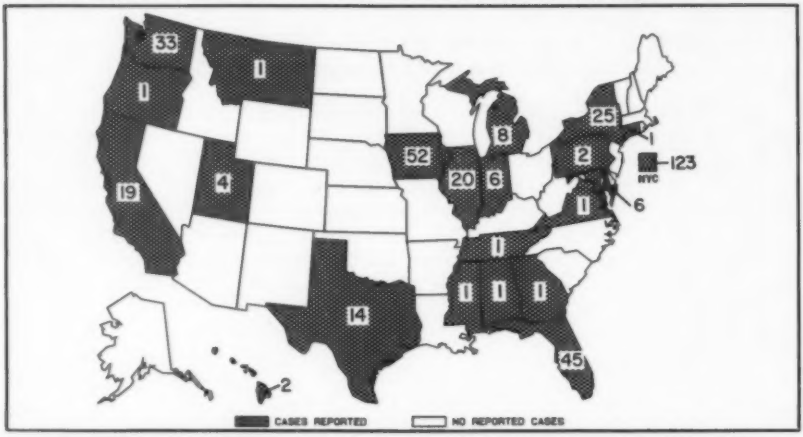
Notice to Readers

Availability of *Proposed National Strategies for the Prevention of Leading Work-Related Diseases and Injuries, Part I*

In May 1985, the Association of Schools of Public Health, in cooperation with the National Institute for Occupational Safety and Health (NIOSH), convened the first National Symposium on Prevention of Leading Work-Related Diseases and Injuries in Atlanta, Georgia. Strategies proposed by NIOSH for the prevention of occupational lung diseases, musculoskeletal injuries, occupational cancers, severe occupational traumatic injuries, and cardiovascular diseases were discussed by professionals from all sectors of the occupational safety and health community. The publication from this symposium, *Proposed National Strategies for the Prevention of Leading Work-Related Diseases and Injuries, Part I,* is available from the Association of Schools of Public Health, 1015 Fifteenth Street N.W., Suite 404, Washington, D.C., telephone (202) 842-4812 (price: $12).

FIGURE I. Reported measles cases — United States, weeks 33-36, 1986



The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report,* Centers for Disease Control, Atlanta, Georgia 30333.

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☆U.S. Government Printing Office: 1986-746-149/40023 Region IV

HHS Publication No. (CDC) 86-8017